

## (U) NAS Oceana Fuel Spill Consolidated Report

ADM Davidson, N00

7 July 2017

Overall Classification:

UNCLASSIFIED//FOUO

UNCLASSIFIED



### (U) Contents

Force Development
Force Generation
Force Employment
Sailors / Civ / Fam
Safety & Security

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Slides 5-8: Incident Summary

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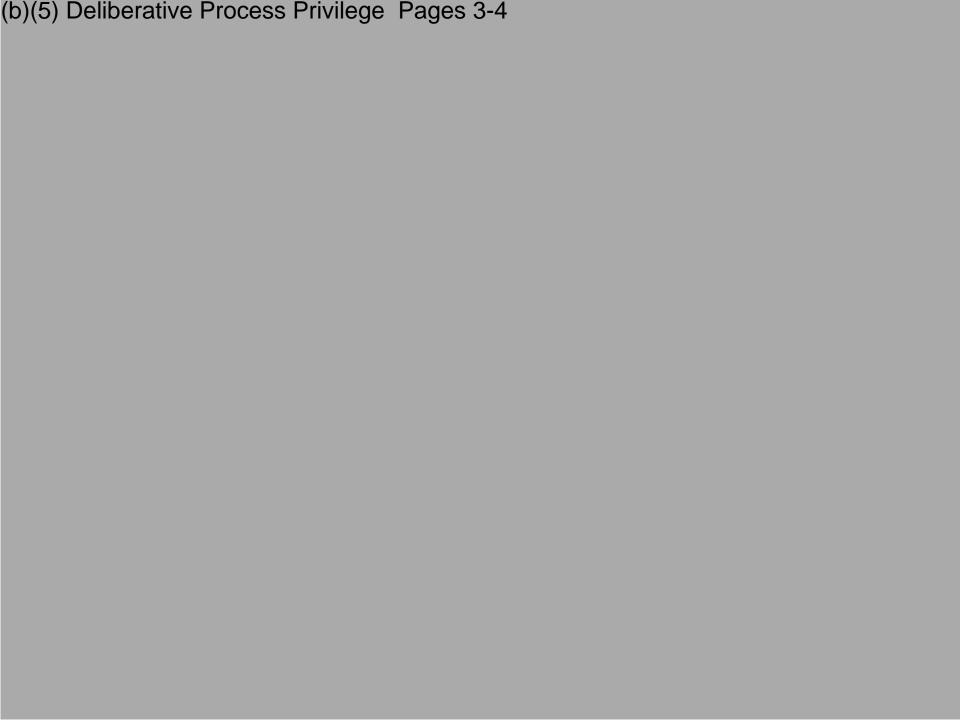
• Slides 15-17: (b)(5) Deliberative Process Privilege

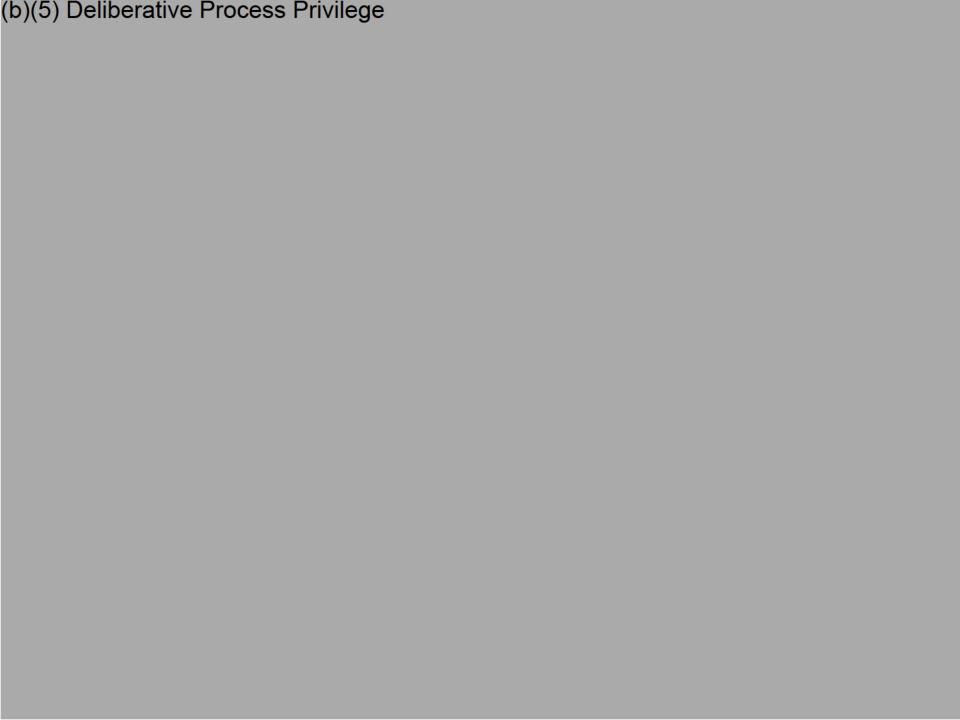
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• Slides 34-49: (b)(5) Deliberative Process Privilege

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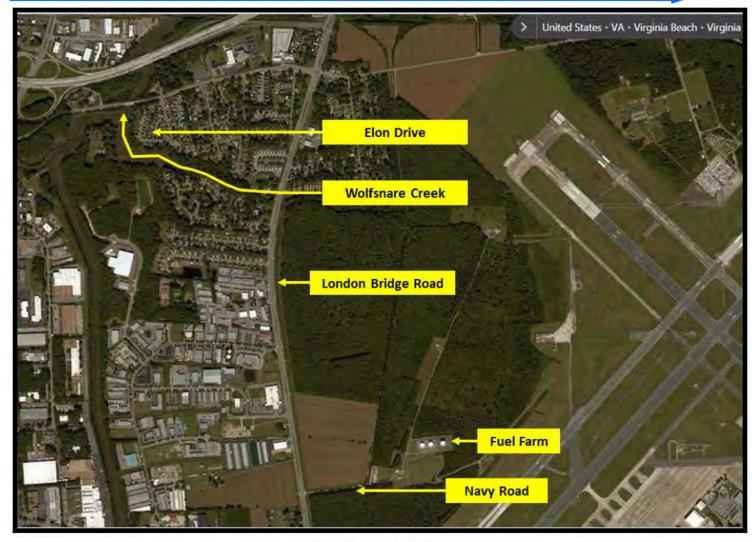






## (U) JP5 Spill Affected Area



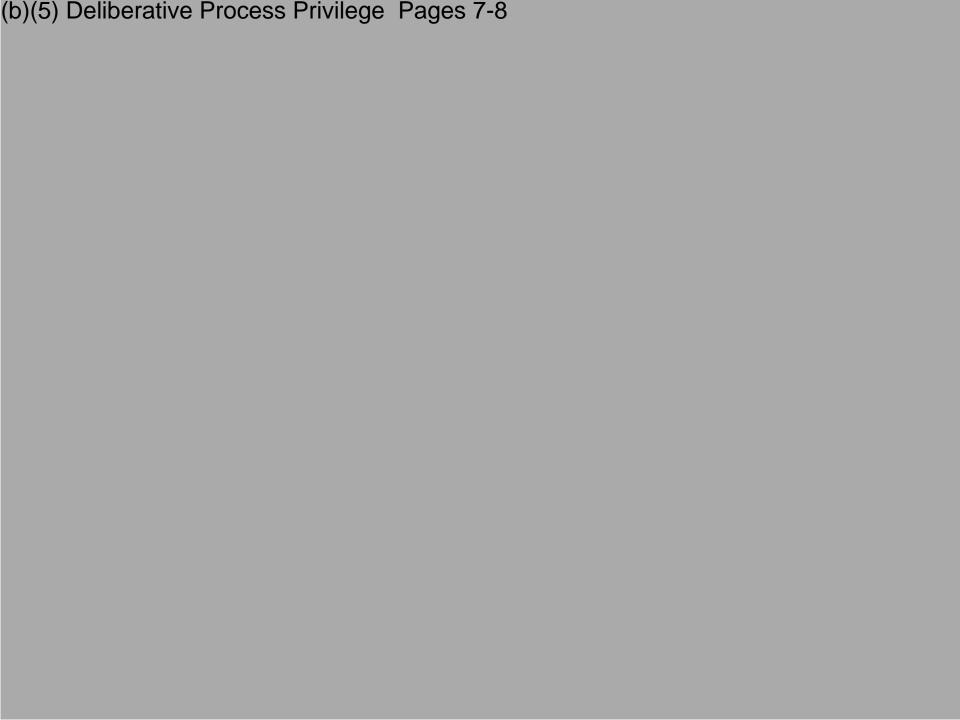


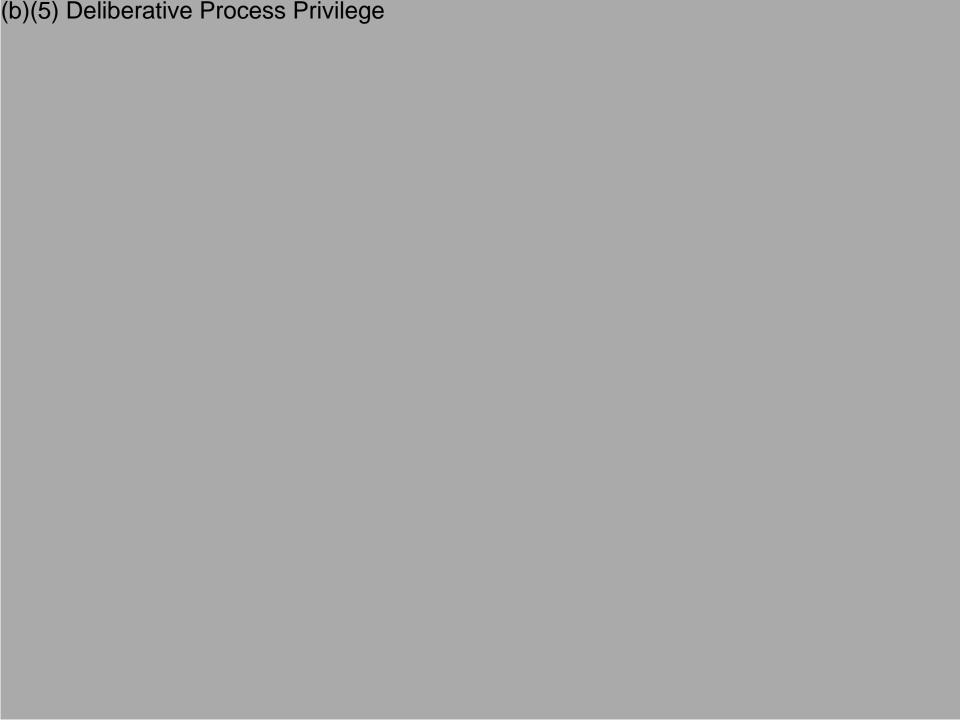


## (U) 11 May NAS Oceana Fuel Spill What Happened



- (U) ~96K gallons of JP5 spilled due to improper valve position
- (U) Spill contaminated surrounding land and entered Wolfsnare Creek
- (U) Fumes drove voluntary temporary relocation of 51 families
- (U) Oily waste and contaminated soil were removed from affected areas
- (U) Emergency response phase concluded 26 May
- (U) Combined response involved multiple agencies
  - Federal: DLA, Navy, Coast Guard, EPA, USDA
  - State: Dept of Environmental Quality, Dept of Health, Port Authority
  - City: Fire Department and Emergency Services
  - NGO: Tristate Bird Rescue and Research







## **Completed Actions**



### (U) Completed Actions

Force Development
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(U) Cat*	(U) Title	(U//FOUO) Lesson/Observation	(U//FOUO) Recommendation	(U) Lead	(U) Status
D	Fuel transfer window	Conducting late-night fuel transfers to/from bulk storage tanks increases the odds of a mishap and reduces the probability of spill detection.	Change fueling policy to secure all fuel transfers to/from bulk storage tanks NLT 2130. Exceptions will be authorized by FLC Norfolk Fuels Director and/or FLC Norfolk CO.	FLC Norfolk	
D	System inspections	There is no zone inspection program that can help to identify safety and materiel condition issues at the tank farm.	Solidify a zone inspection or similar program to identify safety and materiel condition issues.	FLC Norfolk	
D	Fueling notifications  The Base Fire Department is not always notified prior to beginning bulk fueling operations.		Review fueling checklist to ensure that installation Fire and Emergency Services personnel are notified when bulk fueling operations start and finish. Information should include current quantity on hand in gallons and quantity to be received in gallons.		





Force Development	
Force Generation	
<ul> <li>Force Employment</li> </ul>	
Sailors / Civ / Fam	
Safety & Security	

(U) (U) Cat* Title		(U//FOUO) Lesson/Observation	(U//FOUO) Recommendation	(U) Lead	(U) Status
D	Fuel purification requirements	The fuel depot component that led to the spill may not required to meet aircraft fuel purity standards.  Eliminating the use of the installed Product Recovery Tank piping, if allowed, could help to prevent future spills.	Assess requirement to use stripping feature at Product Recovery Tank.	FLC Norfolk	
0	NAS Oceana fuel operations	At the time of the incident, C2 of NASO fuel operations did not clearly align duties and responsibilities for regional fuel operations.	Realign NAS Oceana fuel operations under FLC Norfolk Code 700 Regional Fuel Manager.	FLC Norfolk	
T	All-Hands fueling training	Reviewing fueling policies, procedures, safety factors, and consideration immediately following the event will capture current observations necessary to develop future lessons learned.	Conduct All-Hands stand-down for review of policies and procedures.  Conduct additional Safety stand-down on 26 May.	FLC Norfolk FLC Norfolk	



<sup>\*</sup> DOTMLPFI Categorization

United States Fleet Forces



Force Development
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(U) (U) Cat* Title		(U//FOUO) Lesson/Observation	(U//FOUO) Recommendation	(U) Lead	(U) Status
Ť	T Operator The experience and qualifications fuel farm operators must be appropriate for the assigned tasks		Evaluate operator's experience level and qualifications.	FLC Norfolk	
T	Training programs	Training programs and methodologies need to dedicate sufficient time and resources to failure prevention and emergency actions.	Evaluate training programs and methodologies to include drills, focusing on failure prevention and emergency responses.	FLC Norfolk	
Т	Operational briefs	Fuel depot operators could enhance their situational awareness and operational effectiveness by conducting detailed pre-transfer briefings.	Revise procedures so that before and after critical evolutions, all personnel involved are briefed to understand procedures, emergency response COAs, communication, and the expected system behavior.	FLC Norfolk	
М	Fuel farm components	NASO fuel farm uses drain ball valves in its piping system.	Place a lock on manual drain valves for the bulk fuel filter separators and add spring-loaded ball valves on the bulk fuel system.	FLC Norfolk	
M	Fuel farm components	Not all tanks have an overfill prevention system and a high level alarm/warning indicator.	Inspect to determine if all bulk tanks have an overfill prevention system and/or a high-level alarm/warning indicator.	FLC Norfolk	



<sup>\*</sup> DOTMLPFI Categorization

United States Fleet Forces



(U) Cat*	(U) Title	(U//FOUO) Lesson/Observation	(U//FOUO) Recommendation	(U) Lead	(U) Status
Р	Assigned personnel	Military personnel assigned to the bulk tank area are assigned on a rotational basis.	Permanently assign (vice rotationally assign) military personnel to bulk tank area to work alongside civilian personnel.	FLC Norfolk	
Р	Assigned personnel	When conducting bulk product transfers after normal working hours, few civilian personnel are present.	Augment civilian personnel alongside military forces to cover the night shift for continuity.	FLC Norfolk	
Р	Assigned personnel	Using service members as shift leads would help to monitor fuel farm operations more effectively.	Realign military personnel to incorporate a shift lead.	FLC Norfolk	
Р	Assigned personnel	There is no designated civilian Fuels Distribution System Operator (FDSO) on swing shift and augment to cover the night shift.	Designate a civilian Fuels Distribution System Operator (FDSO) on swing shift.	FLC Norfolk	

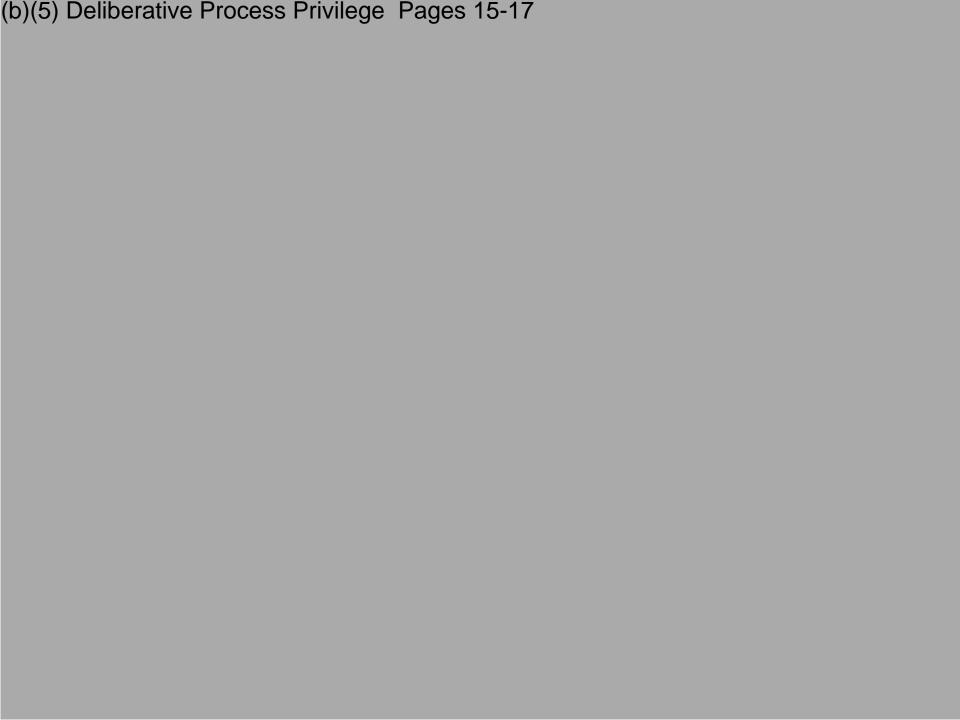


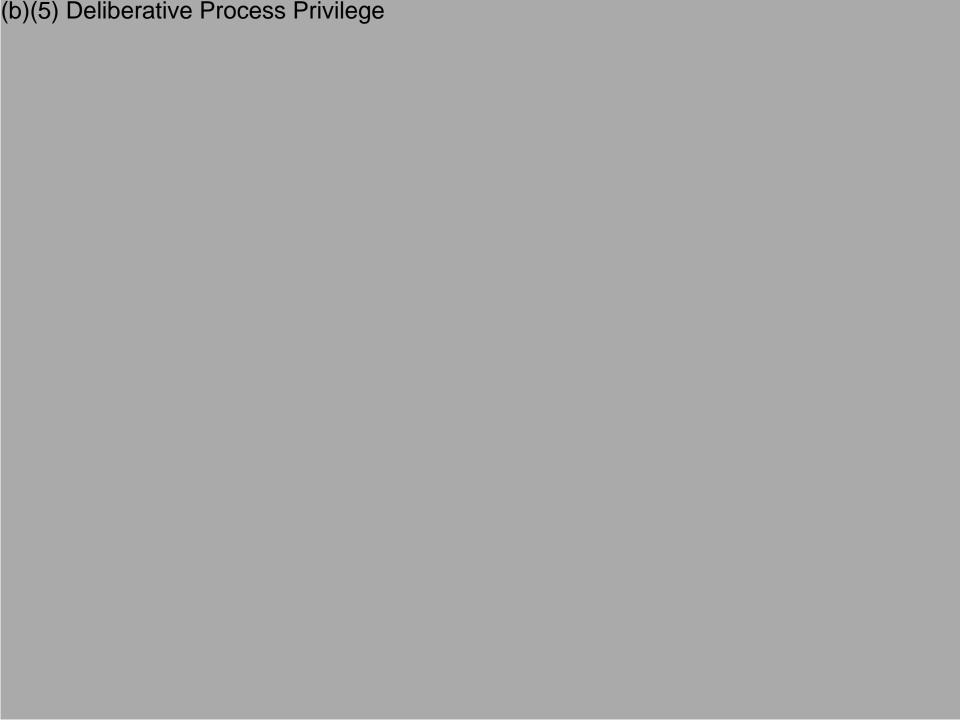


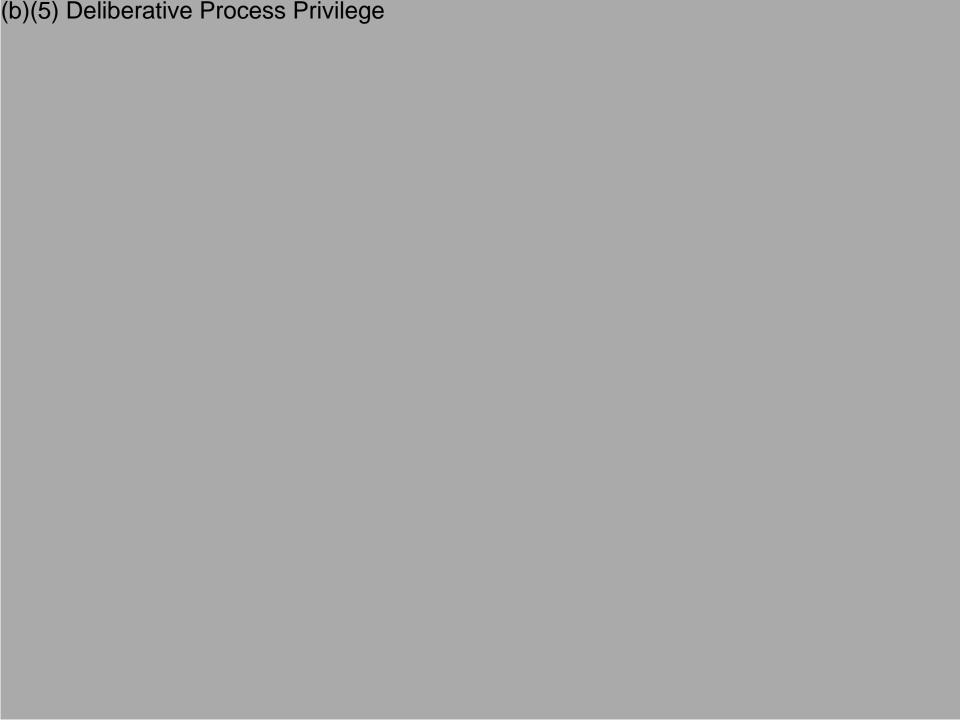
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(U) (U) Cat* Title		(U//FOUO) Lesson/Observation	(U//FOUO) Recommendation	(U) Lead	(U) Status
F	Berm adequacy	Stakeholders must consider whether an inventory holding point should be placed inside a spill containment berm.	Consider the possibility of placing inventory holding points in spill containment berms.	FLC Norfolk	
D	UC media processes and requirements	processes information sharing, and established and media/public engagement processes	Navy supporting elements must recognize and account for likely delays and train accordingly; PA training addresses these UC modalities. USFF PA offer to conduct additional training for stakeholder Public Affairs officers that operate, or could operate, within a UC structure.	USFF PAO	
Т	Public engagement	Initial reports to the media were overly optimistic.	USFF PA offer to conduct additional training for stakeholder PA officers.	USFF PAO	











# Additional Context and Background

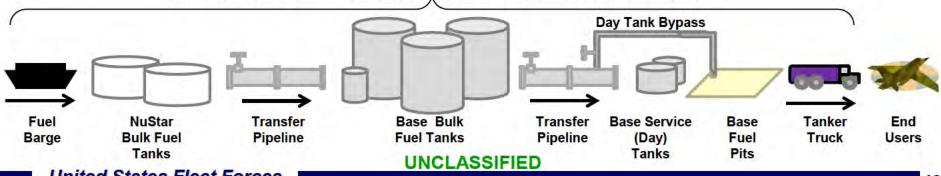


## (U) NAS Oceana Fuel C2 Tracing MF&T and Product Flow

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- (U) Defense Logistics Agency (DLA)
  - Acquires bulk fuel for all the Services via Defense Working Capital Fund
  - Funds fuel depot maintenance and repair (typically executed by Army Corps of Engineers)
- (U) Navy Supply Systems Command (NAVSUP)
  - Manages Navy fuel operations (NAVSUP Energy)
- (U) Fleet Logistics Center (FLC) Norfolk
  - Coordinates and directs fuel operations from source to end users at Region installations
  - Responsible for fuel operations manning, training, safety, and procedural compliance
  - Executes minor Navy fuel depot upkeep (e.g., preservation and cleanliness)
- (U) NAS Oceana
  - Provides emergency response capability
  - Directs base Public Works Department
- (U) Operational Unit
  - Purchases fuel from DLA using OM&N (fund code 7F)

Until the point of delivery to the operational unit, fuel belongs to DLA

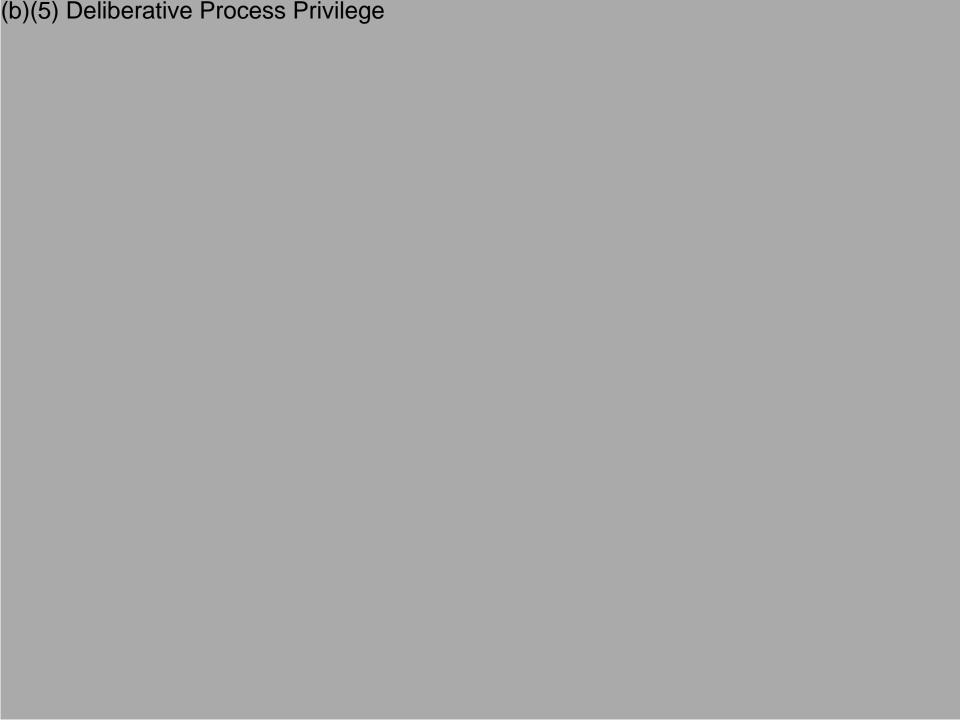




### (U) Available Response Funds Various Sources and Applications

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Fund Type	Authorization	Uses
Emergency and Extraordinary Expense (EEE)	SECNAV/DoN AA	OMN used to cover expenses that cannot be anticipated or those that cannot be classified. Can be used for any purpose that SECNAV considers proper; determination is final and conclusive.
Environmental Compliance (EC)	Various Ech IIs and Ech IIIs	OMN used to execute all environmental compliance programs, such as NEPA analysis and NEPA documentation requirements. Can be reprogrammed in exigent circumstances to address some emergent environmental challenges.
Tort Claims	OJAG Code 15	The Tort Claims Act (TCA) permits private parties to sue the U.S. government in a federal court for most torts committed by individuals acting on behalf of the U.S. government.
Personnel Claims	OJAG Code 15	The Personnel Claims Act (PCA) is intended to address hardships that arise when military personnel or federal employees experience losses or damages related to their service.
Oil Spill Liability Trust Fund (OSLTF)	U.S. Coast Guard	Available when authorized by USCG <u>during an incident response that has been federalized</u> (i.e., executed under the Unified Command structure). Used to cover removal costs incurred by the Coast Guard and EPA; state access for removal activities; payments to federal, state, and Indian tribe trustees to conduct natural resource damage assessments and restorations; payments of claims for uncompensated removal costs and damages; and related research and development activities. Supported and sustained by a tax on the oil industry.





## (U) Summary of Press Releases and Media Events



- (U) Navy Region Mid-Atlantic Release (#1) May 11
- (U) Navy Region Mid-Atlantic Media Avail Advisory May 11
- (U) NAS Oceana CO & UC CO/Partners on scene May 11
- (U) Unified Command Release (#2) May 13
- (U) Unified Command Release (#3) May 14
- (U) Unified Command Release (#4) May 15
- (U) NAS Oceana CO & UC CO/Partners at Public Information Meeting May 15
- (U) Unified Command Release (#5) May 17
- (U) NAS Oceana CO & UC CO/Partners at Firehouse May 17



# (U) Summary of Press Releases and Media Events (cont'd)



- (U) Unified Command Release (#6) May 19
- (U) Navy Region Commander and UC at NAS Oceana May 19
- (U) Unified Command Release (#7) May 20
- (U) Unified Command Release (#8) May 22
- (U) Unified Command Release (# 9) May 23
- (U) Unified Command Release (#10) May 25
- (U) Unified Command Release (#11) May 26
- (U) NAS Oceana CO & UC CO/Partners at NAS Oceana May 26
- (U) RADM Scorby Media Availability June 23



# (U) Key Distinction in NAS Oceana Fuel Spill Response

- (U) On-base response contained to Navy property: Navy leads
  - NAS Oceana (Fire and Rescue, Public Works Division Environmental)
  - FLC Norfolk
- (U) Off-base response that involves marine waters: Federal On-Scene Coordinator (USCG) leads under Unified Command\*
  - U.S. Coast Guard
  - City of Virginia Beach
  - Virginia Department of Environmental Quality
  - Navy Region Mid-Atlantic (Navy On-Scene Coordinator)
  - Other agencies as circumstances warrant

\*In a Unified Command structure, USCG can authorize Oil Spill Liability Trust Funds to address emergent containment/mitigation requirements



## (U) Early Responses As Seen Through Familiar Lens





#### (U) Symptoms and indications

NAS Oceana Fuel Farm reports spill to CNRMA RDC

### (U) Immediate actions

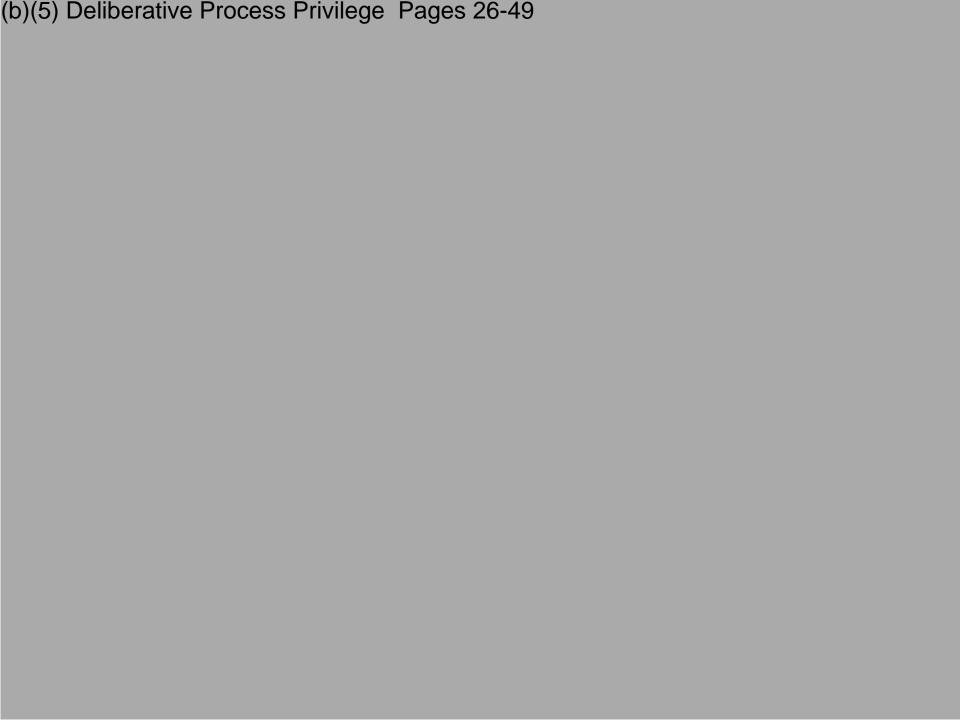
- CNRMA RDC notifies NAS Oceana CDO and FD
- NAS Oceana FD responds to scene
- NAS Oceana CDO and CMC investigate, confirm spill
- NAS Oceana FD notifies VB FD
- NAS Oceana PWD informs National Response Center

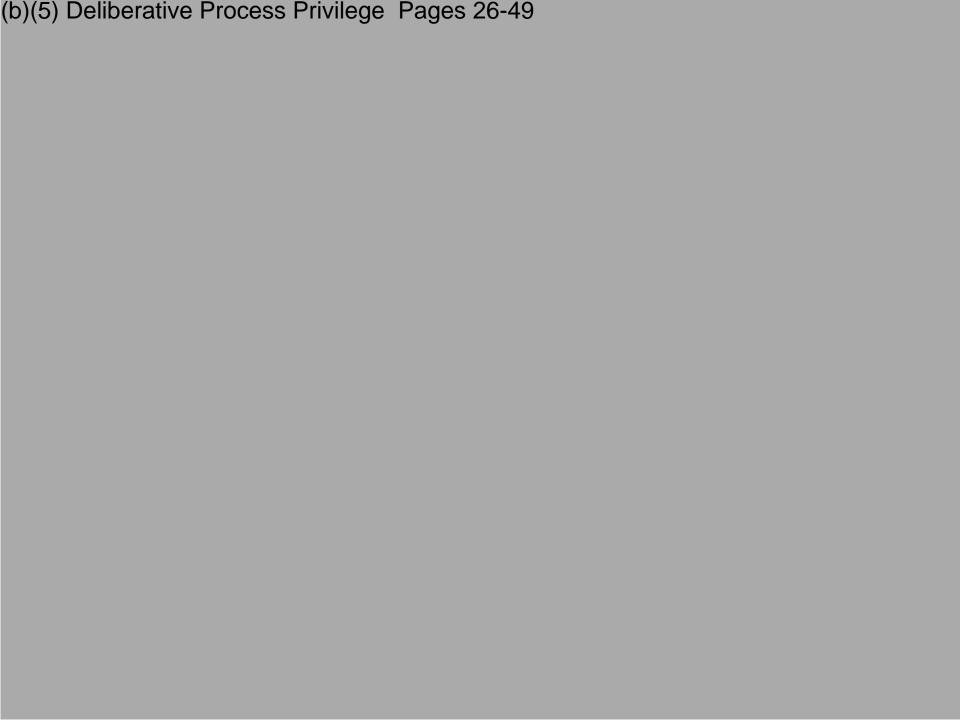
### (U) Controlling actions

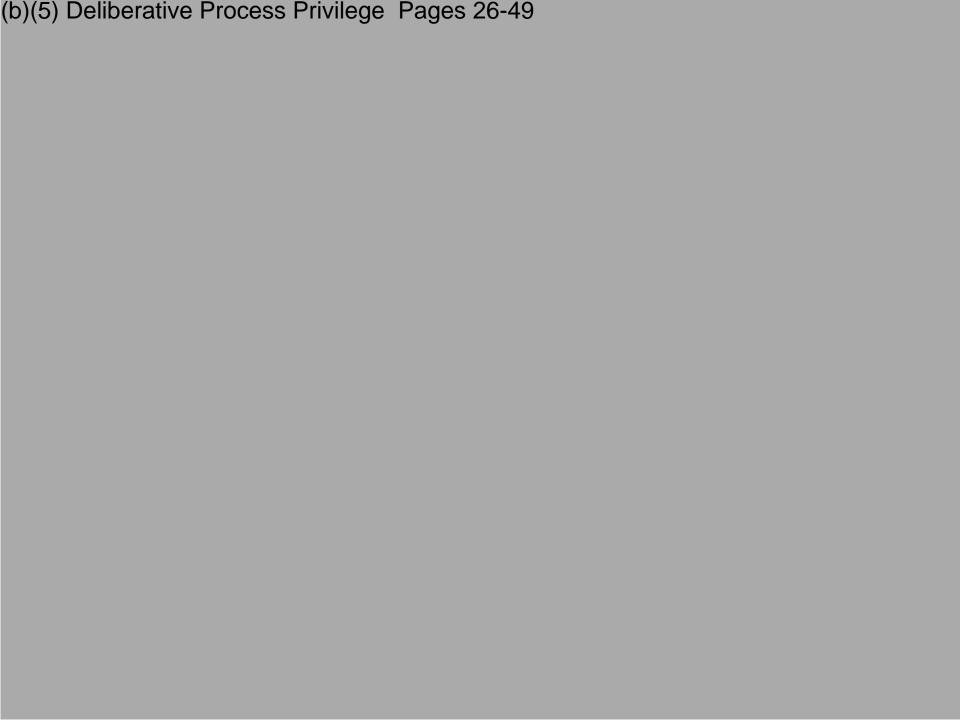
- NAS Oceana activates Emergency Operations Center
- Acting NOSC arrives on-site
- NAS Oceana PWD uses backhoes to contain spill
- VB FD tracks product flow, places containment booms
- Contracted emergency response support team arrives
- VB closes northbound lane of London Bridge Road
- Product recovery begins
- Unified Command established
- Emergency Response phase declared
- UC/Navy conduct press availability

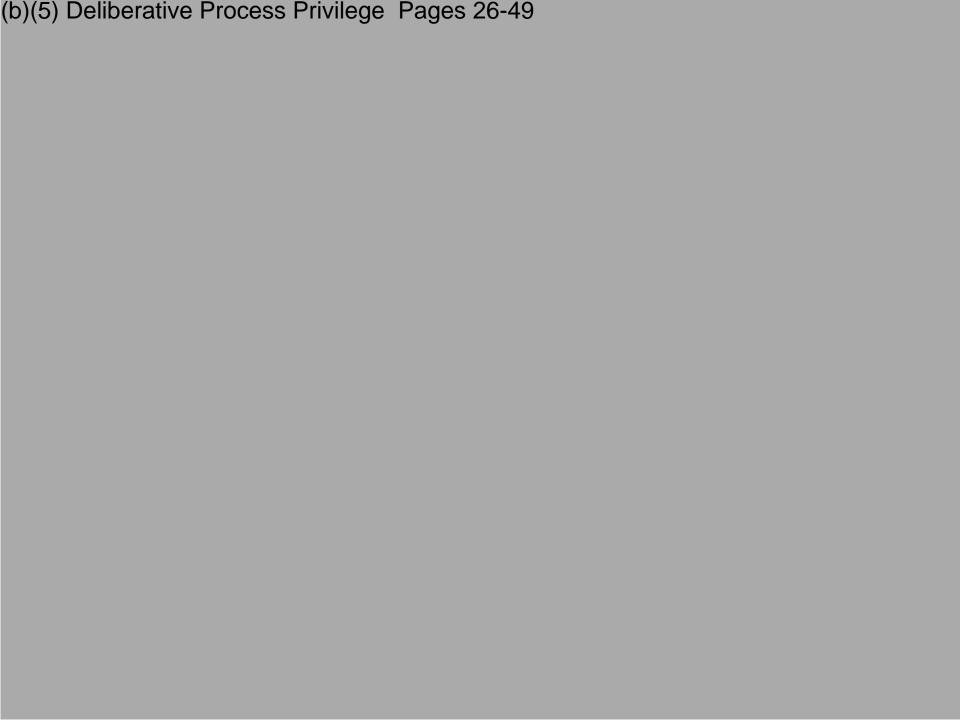
**Engineering O**perational Casualty Control

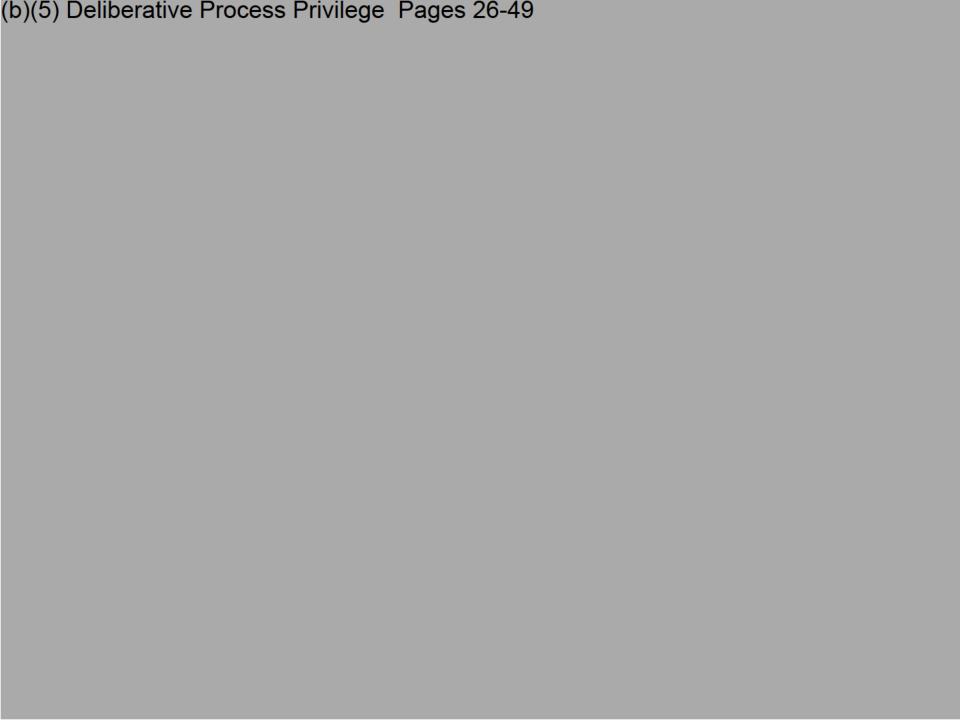
All completed by the afternoon of May 11th

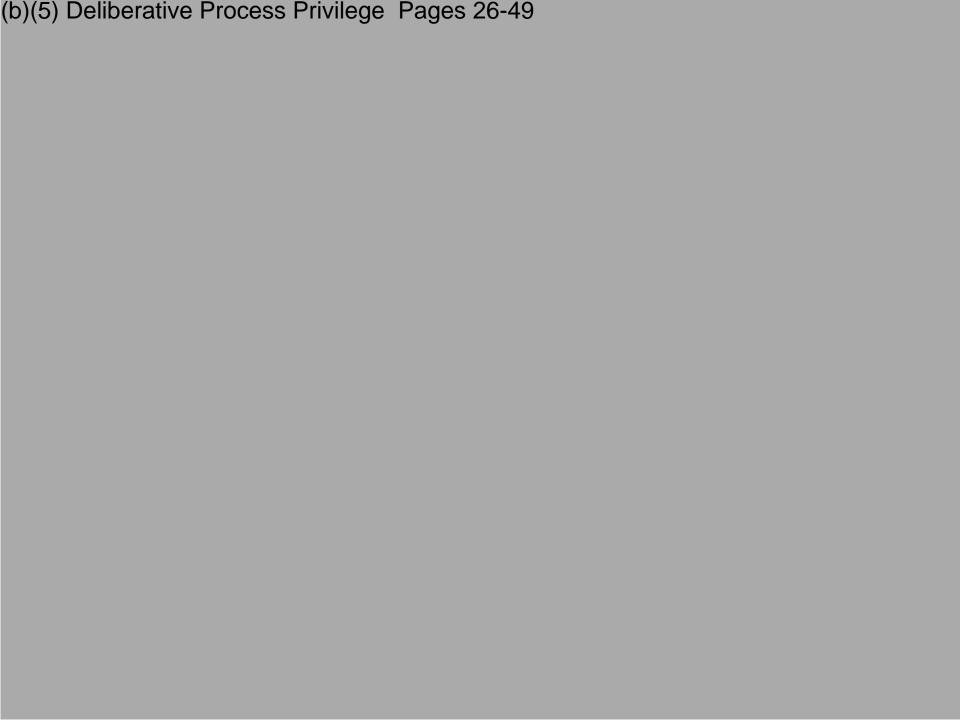


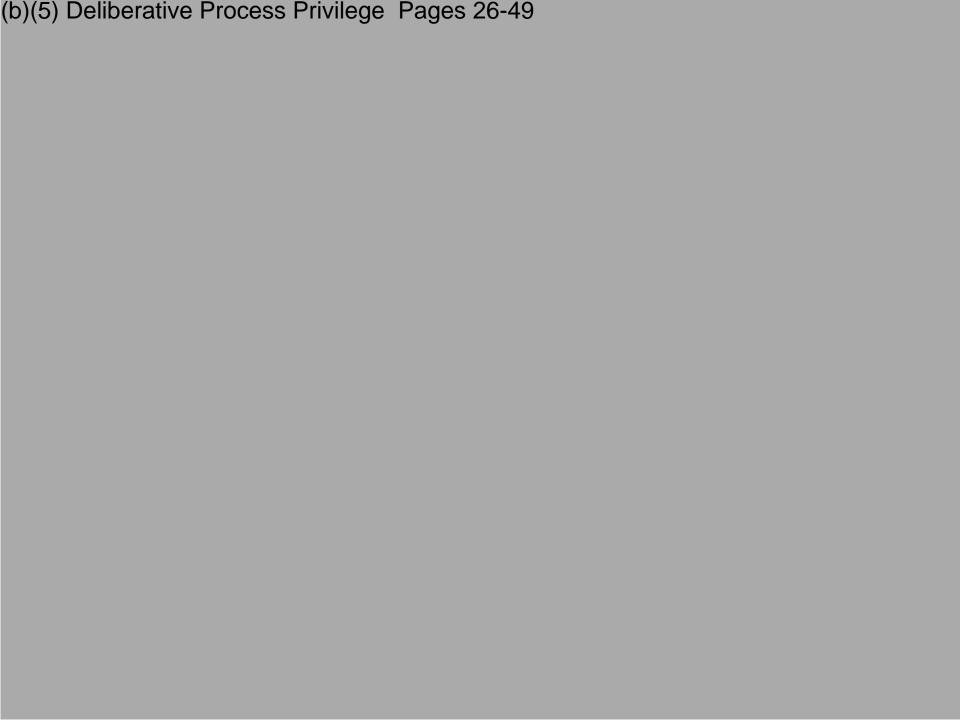


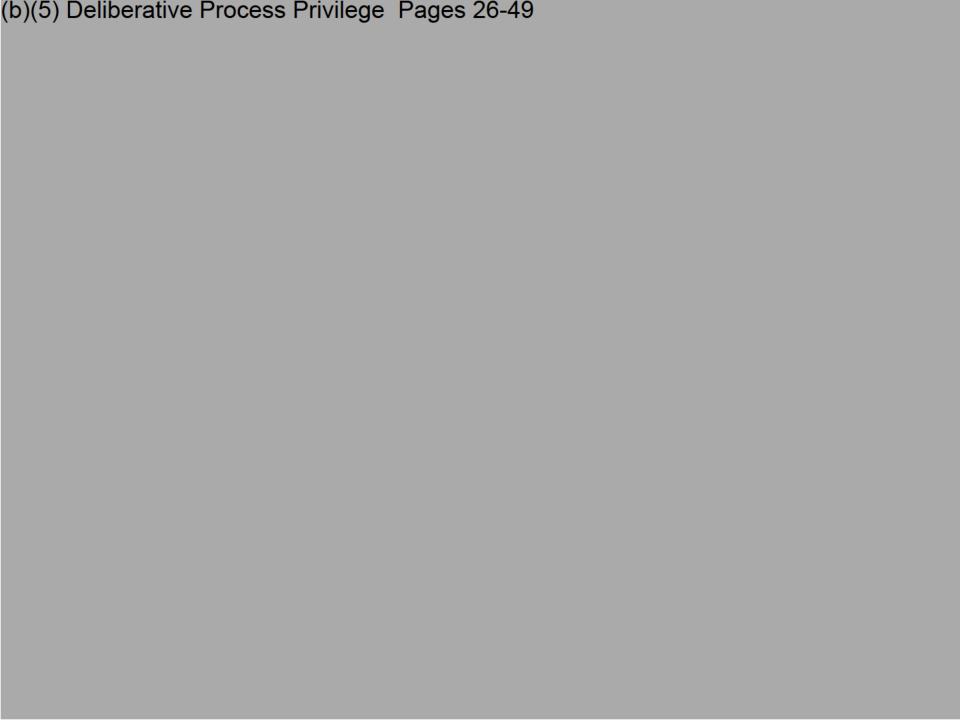


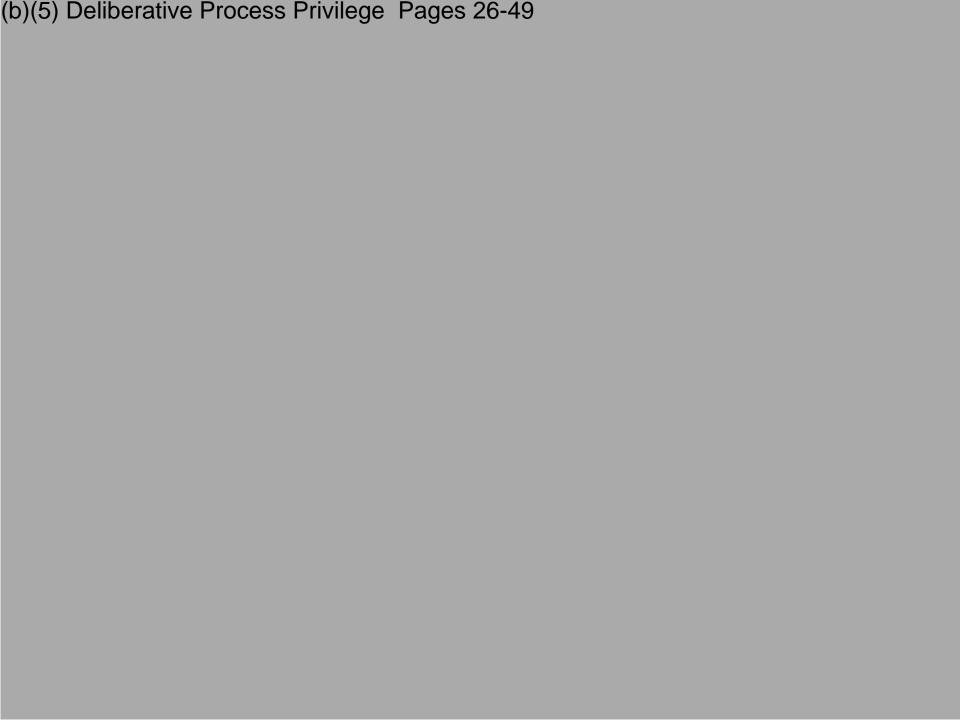


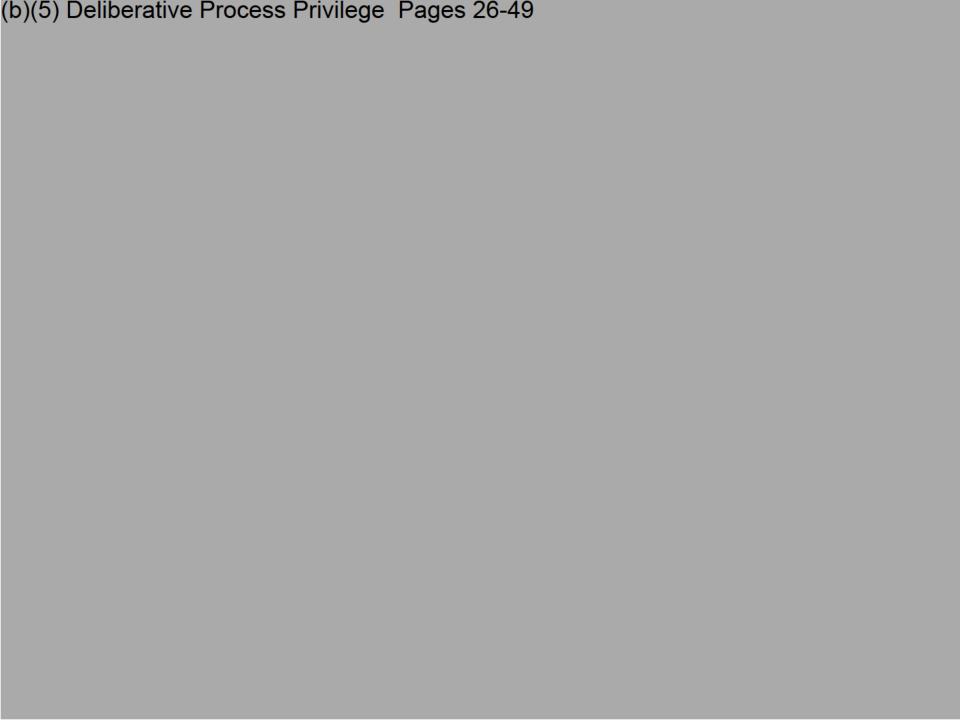


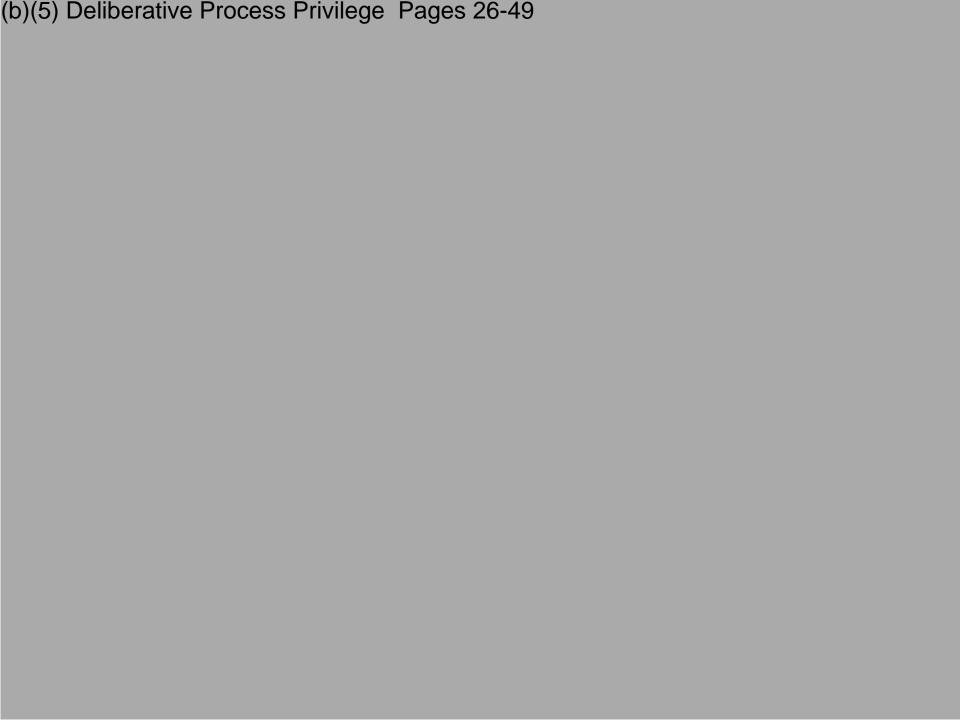


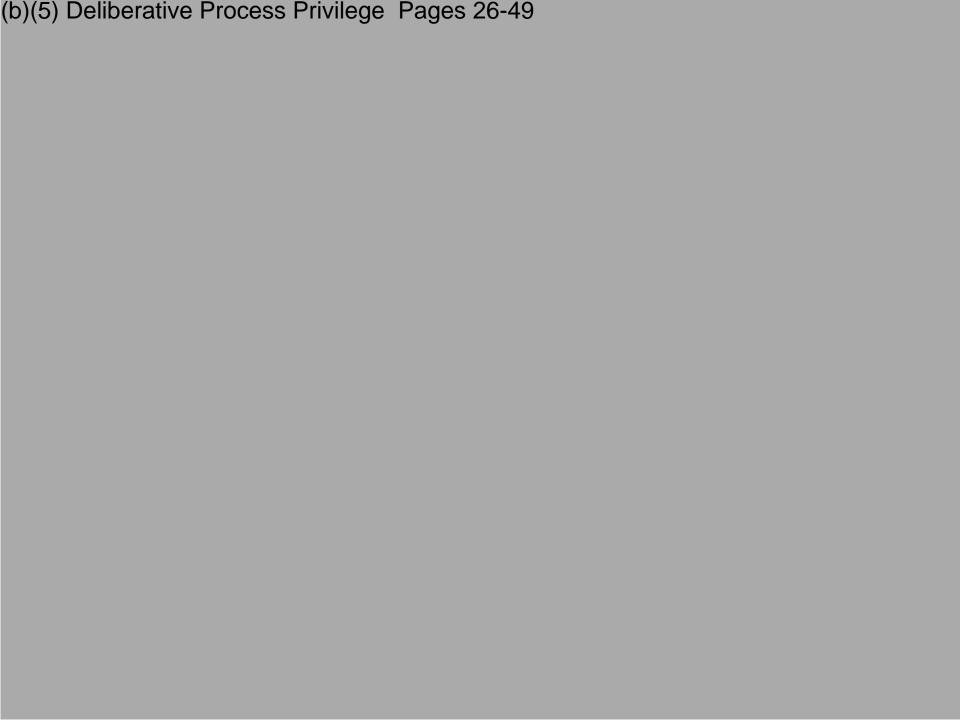


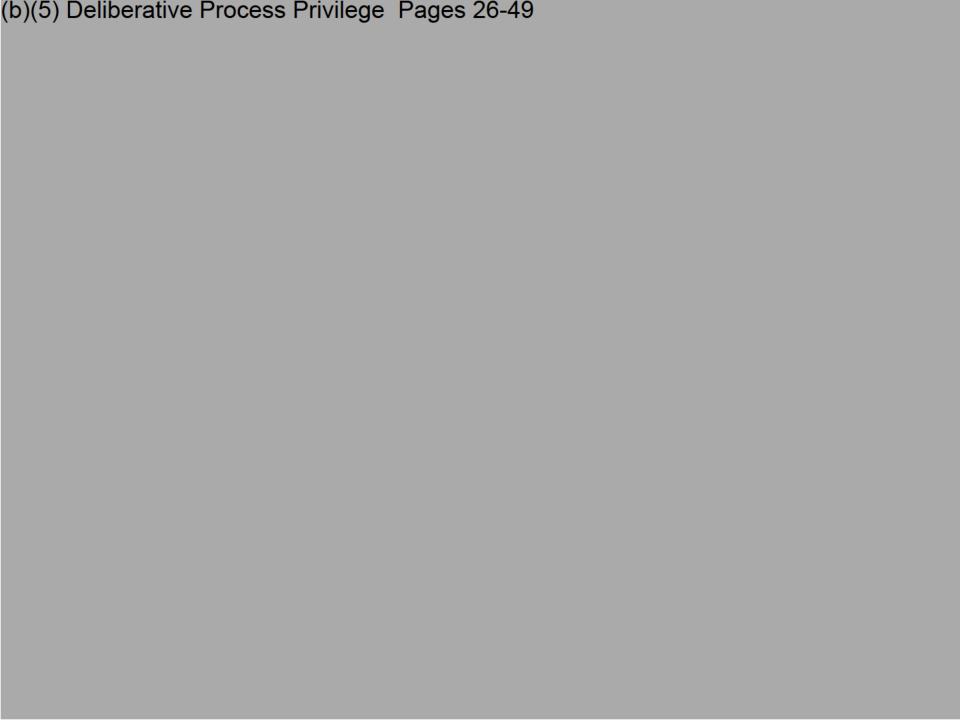


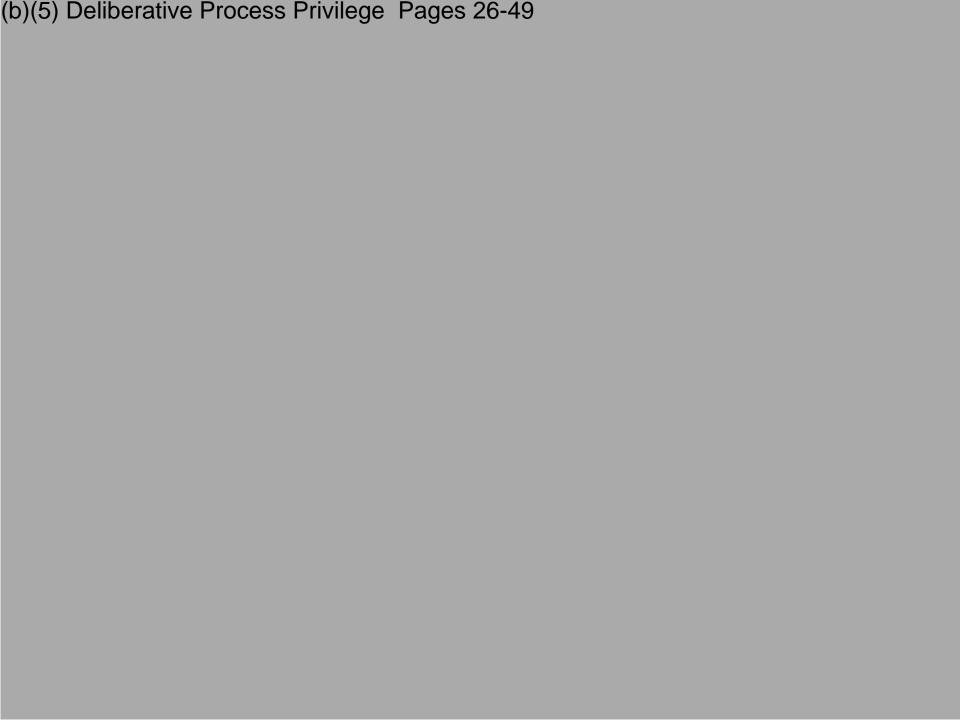


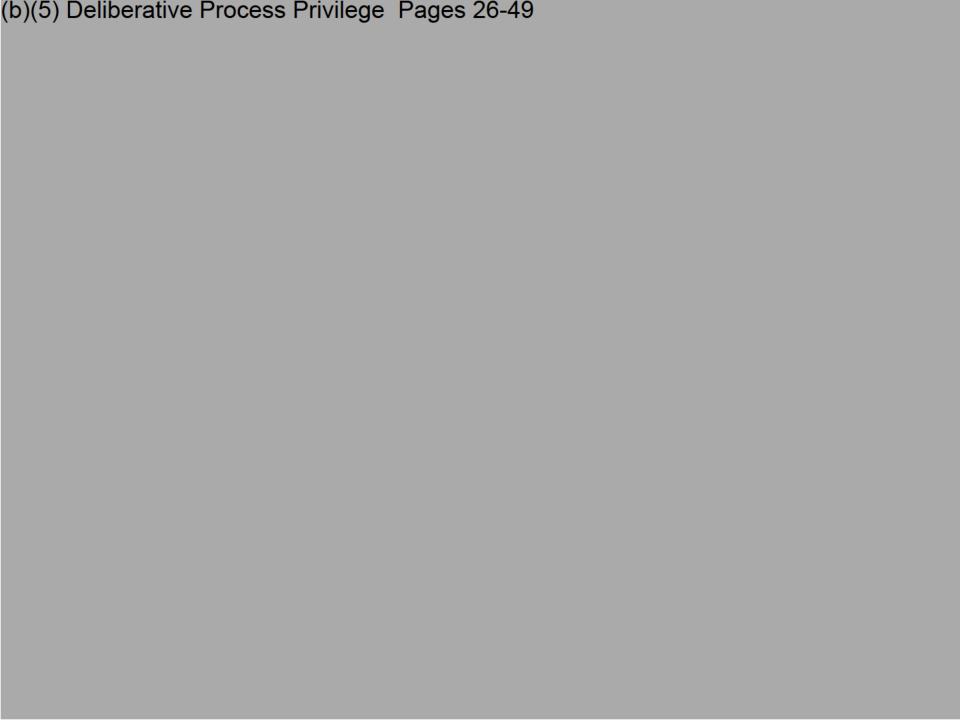


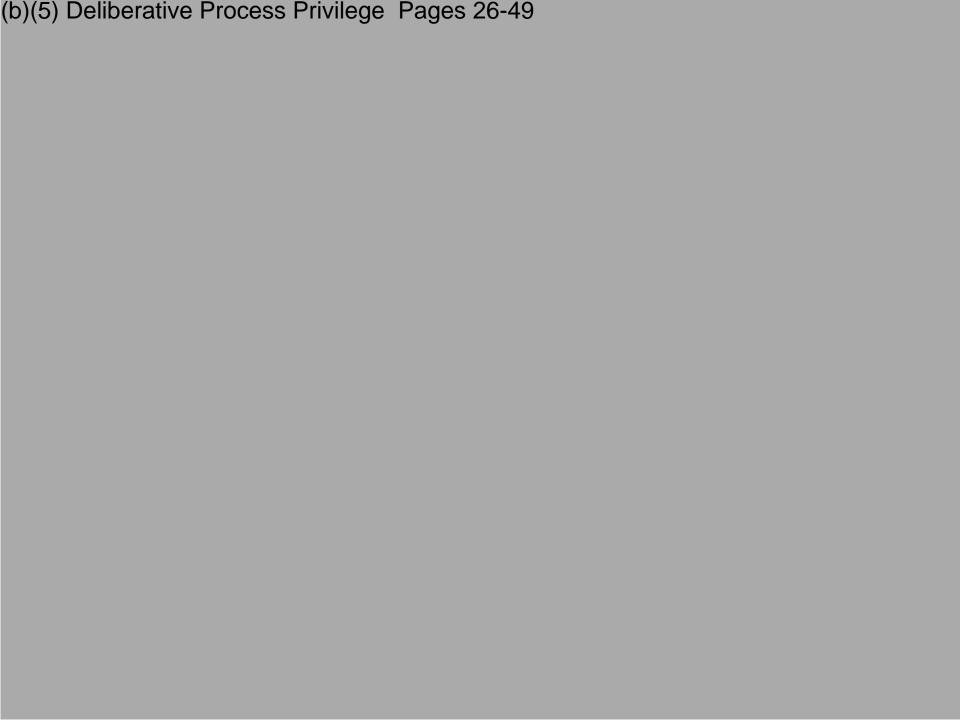


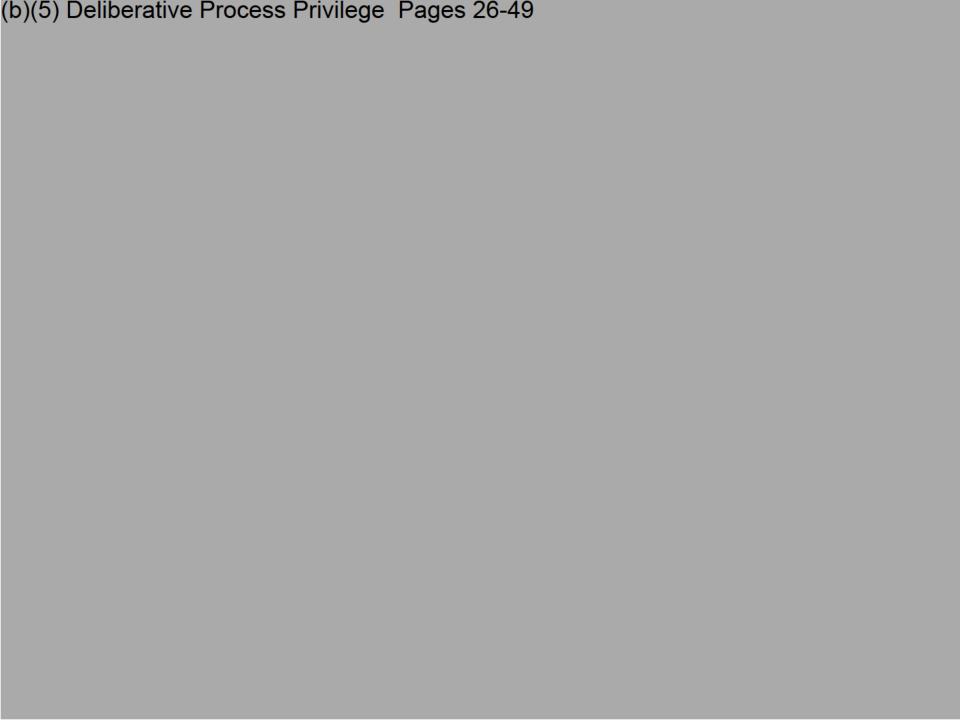


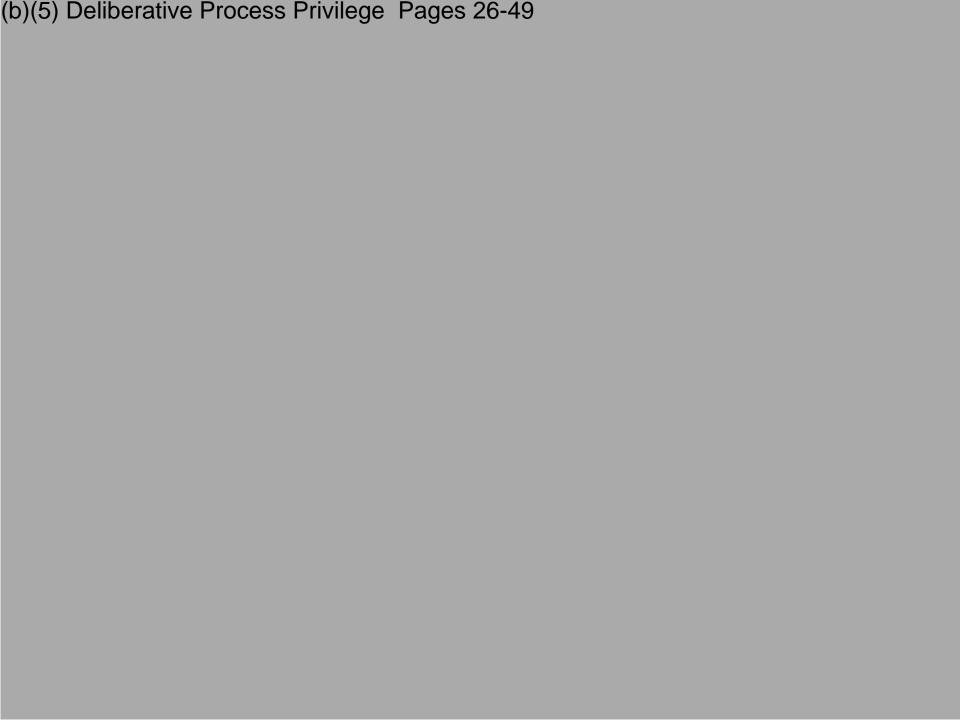


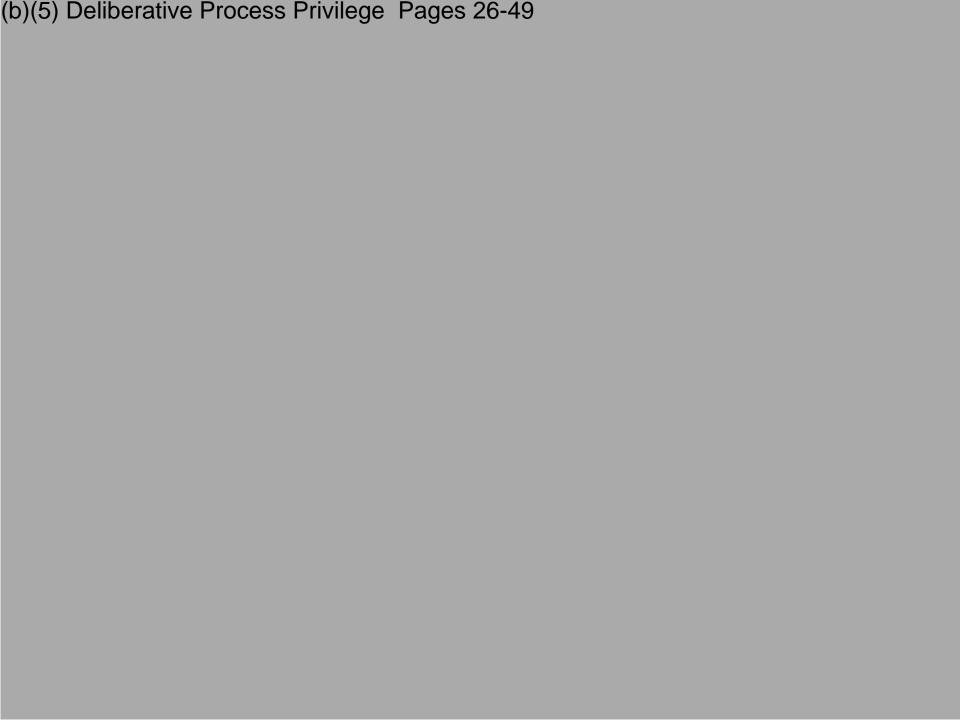


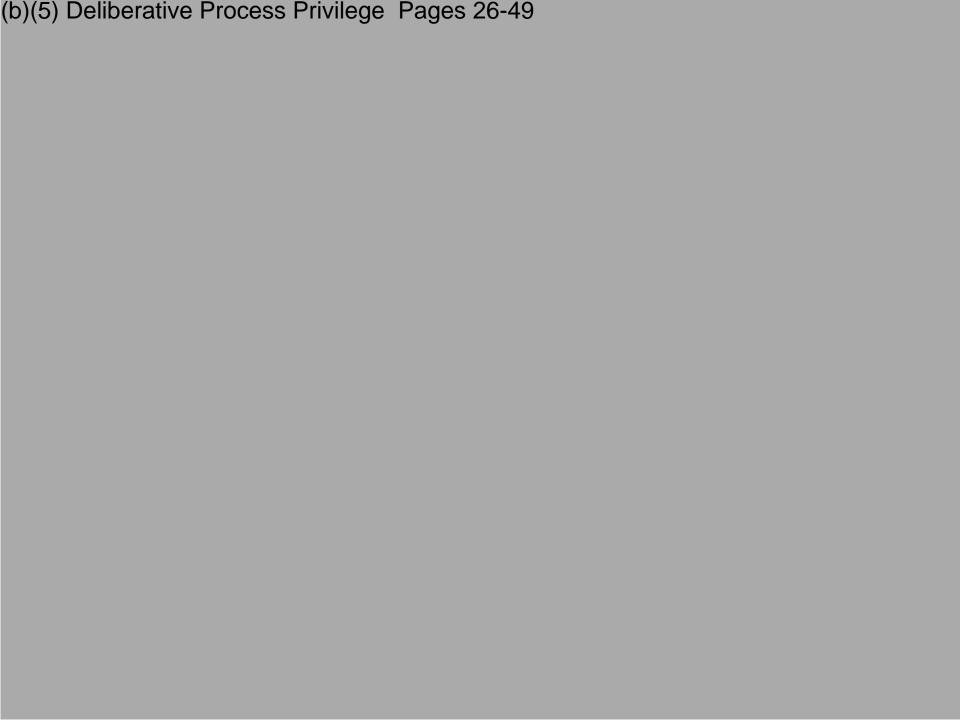


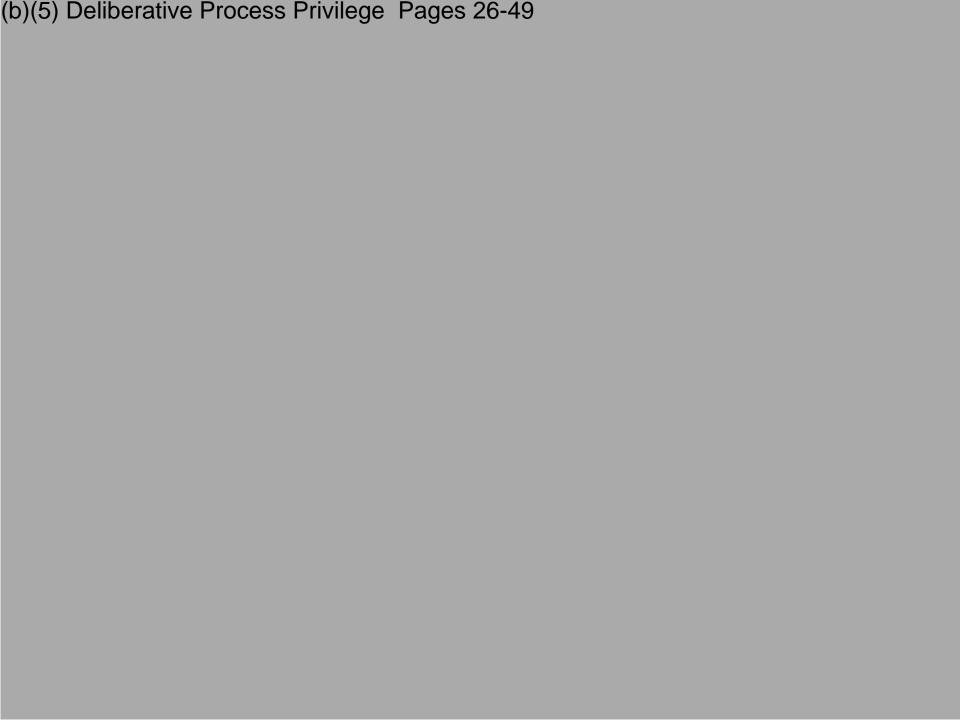


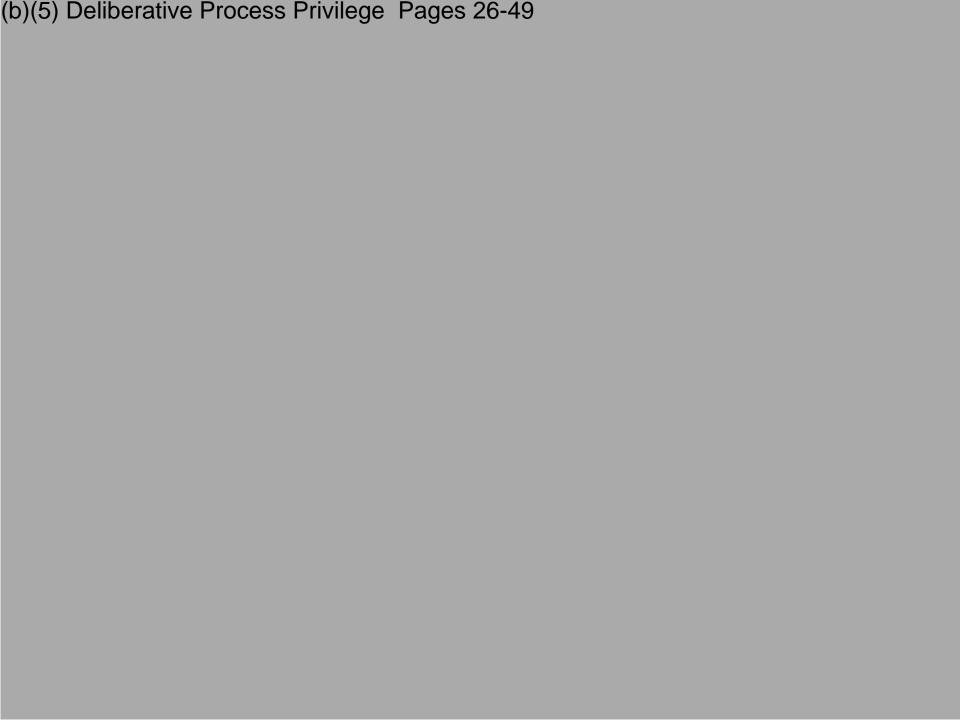


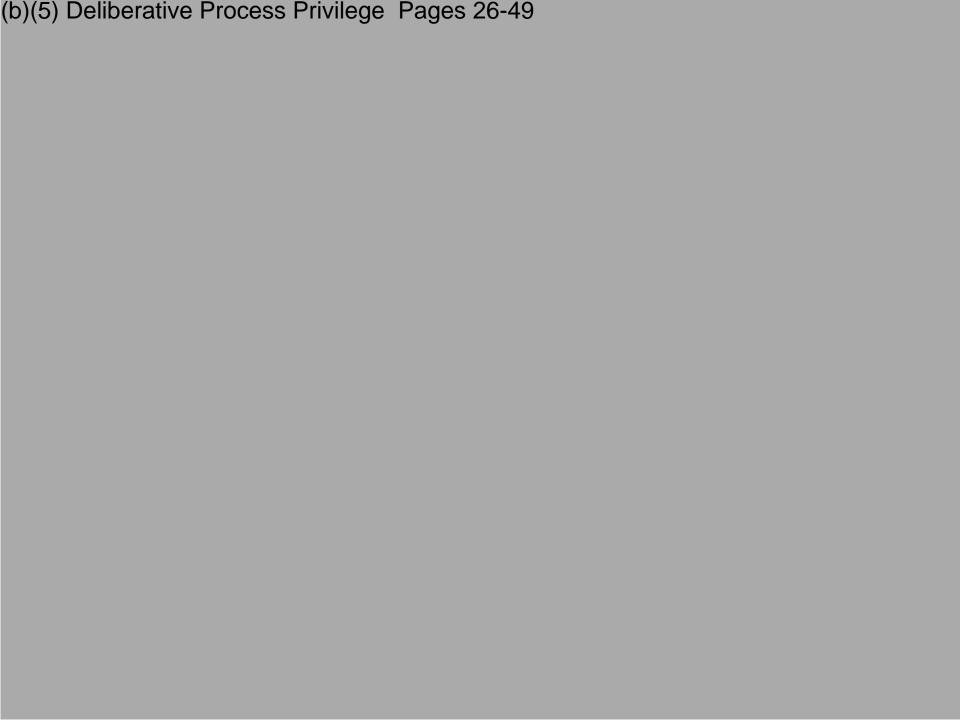


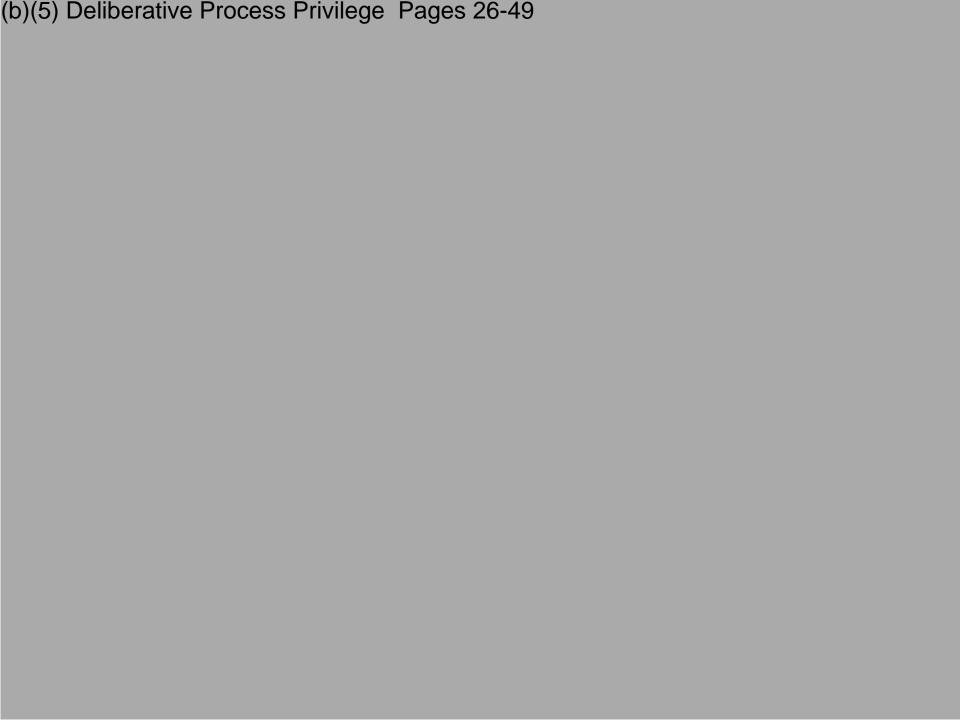














#### JP5 Spill Response Timeline





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#### JP5 Spill Response Timeline Thursday 11 May



0643: JP5 spill reported by NAS Oceana fuel farm to CNRMA

Regional Dispatch Center (RDC)

0645: RDC notifies NAS Oceana Fire Dept. and CDO

0655: NAS Oceana Fire Dept. on scene

0735: CDO/CMC investigate

0745: NASO FD notifies VB FD of spill along London Bridge Rd

0800: CMC confirms "large JP5 spill"; PWD EV notifies National

**Response Center** 

0830: VB Fire Dept. on scene; begins tracking product flow ultimately to

Wolfsnare Creek; begins placing containment booms

0845: NAS XO on scene

0900: NAS Oceana EOC activated

0900: PWD backhoes arrive on scene; dam ditch along Navy Rd and

London Bridge Rd ditch (north/southbound)



#### JP5 Spill Response Timeline Thursday 11 May



1000: HEPACO on scene; continues boom placement

1100: Product recovery begun

1200: VA Port Authority mobile command post on scene at Precision Drive; Unified Command (UC) is established (USN, USCG, VB Emergency Manager, VA Department of Environmental Quality (VADEQ); Emergency Phase of response is declared

1200 + London Bridge Rd northbound closed; recovery work continues

1600: Press availability (CO, USCG Deputy, Hampton Roads)

1600+ Recovery work continues overnight; flushing of ditches alongside London Bridge Rd; air samples are within acceptable limits, however strong odor persists



## JP5 Spill Response Timeline Friday 12 May to Sunday 14 May



12 May, 0000 + Recovery work continues; reports of affected wildlife received; FLC Norfolk initiates JAGMAN investigation; strong odor, but air samples within acceptable limits

13 May, 0000 + Recovery work continues

14 May, 0000+ Recovery work continues

1200: Need for Public Information Meeting (PIM)

discussed by UC



#### JP5 Spill Response Timeline Monday 15 May



0000+ Recovery work continues

1200: PIM planned; London Bridge Baptist Church secured

as venue by VB Emergency Manager

1700: PIM conducted; stations include Recovery Ops, Water

Quality, Air Quality, Health, Wildlife, Legal; contact

information of ≈ 100 attendees collected; UC

members provide answer media questions

1900: PIM concludes



#### JP5 Spill Response Timeline Tuesday 16 May



0000+ Recovery work continues

1200: CNRMA and CO tour NAS Oceana fuel farm, primary

Wolfsnare Creek recovery site, affected neighborhood

1500: UC decision made to offer voluntary, temporary

relocation for affected residents; funding source is Oil

**Spill Liability Trust Fund** 



# JP5 Spill Response Timeline Wednesday 17 May



0000+ Recovery work continues

1400: Press availability

1500: Dedicated telephone no. for temporary relocation requests established; flyers informing residents of temporary relocation initiative created; hotel rooms secured

1630: NAS Oceana CMC and sailors canvass neighborhood with temporary relocation flyers

1700 to 2300: Begin temporary relocation of what will ultimately number 51 families



### JP5 Spill Response Timeline Thursday/Friday 18/19 May



18 May, 0000+ Recovery work continues

0800: Temporary relocation settlement issues continue throughout the day; around-the-clock air quality readings near zero; slight smell in area near main recovery site

19 May, 0000+ Recovery work continues

0900: Press availability: CNRMA, UC members; noted that emergency phase will continue into the next week



# JP5 Spill Response Timeline Saturday/Sunday 20/21 May



20 May, 0000+ Recovery work continues

1100: CNRMA and XO visit NASO fuel farm and surrounding neighborhoods; air quality samples continue near zero; no detectable odor

21 May, 0000+ Recovery work continues

1100: CNRMA visits surrounding neighborhoods; speaks with contractors; Wolfsnare Creek now free of product; response team begins maintenance phase, i.e., routine checking of booms and responding to emerging product; air quality samples in the neighborhood continue to indicate near zero

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# JP5 Spill Response Timeline Monday/Tuesday 22/23 May



22 May 0000+ Recovery work continues; efforts focused on London Bridge Road ditch

23 May 0000+ Recovery work continues

1700: SECNAV approves use of EEE funds with which to provide meals reimbursement for relocated families; CNRMA updates SEN Kaine



### JP5 Spill Response Timeline Wednesday/Thursday 24/25 May



24 May, 0000+ Recovery work continues; work continues on London Bridge Rd ditch; air quality samples indicate zero and there is no smell of fuel in the area

25 May, 0000+ Recovery work continues

0900: Shoreline Cleanup Assessment Team agrees that all goals of Emergency Response Phase have been met; UC plans to demobilize emergency response personnel and emergency resources effective 1200 Friday; assessment and remediation to continue under USN, monitored by VDEQ



## JP5 Spill Response Timeline Friday/Saturday 26/27 May



26 May, 0000+ Recovery work continues

1000: UC holds press availability; announce conclusion of Emergency Phase and beginning of Remediation Phase; emphasize that top priority remains affected residents; per diem checks delivered to 43 relocated families; permission obtained from VB to close one lane on London Bridge Road to permit work on roadside ditch

27 May, 0000+ Recovery work continues



#### JP5 Spill Response Timeline Sunday 28 May



1600: Work on London Bridge Road ditch is completed; cleanup efforts continue on NAS Oceana property with expected completion 09 June; issues raised by affected residents continue to be addressed as they are raised



## JP5 Spill Response Timeline Friday 2 June



1600: Second round of per diem checks hand delivered to temporarily relocated residents